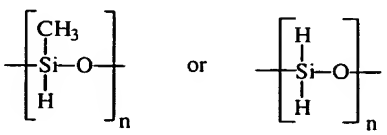
# Remarks

Claims 14 - 31 are pending. Favorable reconsideration is respectfully requested.

The subject invention is directed to novel Si-H-functional branched siloxanes which, when used in relatively small amounts in release paper coatings, serve to seriously reduce the aerosol mist which occurs during high speed coating of film and paper.

The claims remain rejected over *Herzig '782*, which is already of record. As indicated in Applicants last response, *Herzig '782* is not directed to suppressing aerosol mist in coating applications, but rather is directed to supplying new Si-H-functional crosslinking agents. The latter, in order to function adequately in most hydrosilylation crosslinking (addition crosslinking; platinum crosslinking) systems, must have a fairly large number of silicon-bonded hydrogens. To prepare such crosslinkers, a three stage reaction is carried out. First, a "starter" molecule with 3 to 10 alkenyl groups (carbostructional unit G) is hydrosilylated with H-Si-terminated (poly)siloxane to form a highly branched molecule with terminal H-Si functionality. This is the same reaction initially employed by Applicant in making their anti-misting additive, except that Applicant's "starters" are limited to a functionality of 3 or 4.

However, at this point, *Herzig '782* and Applicant's inventions take a serious departure from one another. *Herzig's* intermediate products do not contain enough Si-H functionality, and therefore he equilibrates these intermediates with an organosiloxane which has pendant Si-H groups, in order that the resulting crosslinker contain at least 20 mol% of units of formula (I): $H_aR_{2-a}SiO_{2/2}$ where a is 1 or 2. These units are "D" units, i.e. units within a linear portion of a siloxane, and 20% must have either 1 Si-bonded hydrogen or 2 Si-bonded hydrogens, e.g.:



By way of contrast, all the Si-H functional compounds of Applicant contain terminal Si-H units. There are no pendant Si-H units as required from the *Herzig '782* equilibration.

Applicant's compounds may also be lengthened by equilibration, but only by equilibrating siloxanes not containing Si-H functionality. Note claim 14, for example, where the optional equilibration requires linear or cyclic organopolysiloxanes, "wherein said "organo groups are optionally halogenated $C_{1-6}$ hydrocarbon groups. . . ." Thus there are no Si-H functional groups present. Applicant's attorney apologizes for not previously recognizing that *Herzig '782* requires 20 mol% of pendant Si-H functional D units, supplied by the equilibrant.

In summary, prior to equilibration, Applicant's compounds contain only terminal Si-H functionality, and after equilibration, still contain only terminal Si-H functionality, not additional pendant Si-H functionality to increase crosslink density.

It is noted that Applicant does not claim the antimisting additive *per se*, but claim it as a 0.5 to 10 weight percent component of a crosslinkable coating formulation. *Herzig '782* never prepared or suggested such a composition. The only crosslinkable composition prepared by *Herzig* employed his high functionality crosslinker containing both terminal and pendant Si-H functionality. Withdrawal of the rejections over *Herzig '782* is solicited.

Applicants have amended claim 28 to make the equilibration required as opposed to optional. Claim 28 as well as claims 29 - 31, dependent upon claim 28, should also be allowable for reason of this amendment as well as the discussion regarding *Herzig '782*.

Applicants submit that the claims are now in condition for Allowance, and respectfully request a Notice to that effect. If the Examiner believes that further discussion will advance the prosecution of the Application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

Respectfully submitted,

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